

# Disparity Surveillance of Nonfatal Motor Vehicle Crash Injuries

Ying Zhang and Ge Lin

Joint Public Health Data Center

## ABSTRACT

**Objective:** The lack of race information for non-fatal motor vehicle crash injuries in the United States has limited the understanding of racial disparities in motor vehicle crashes (MVCs). In this article, we described a pilot surveillance project in Nebraska that linked crash reports and drivers' license records to investigate racial disparity among non-fatal MVC injuries.

**Methods:** The pilot project linked 43,157 severely and non-severely injured drivers from crash reports between 2006 and 2010 to the corresponding state drivers' license database so that drivers' race information from each MVC could be retrieved. A log rate model was used to examine the likelihood of MVC injuries by drivers' race along the dimensions of age, sex and place of residence.

**Results:** Black drivers had 31.6% and 87% more severe and non-severe injuries, respectively, than white drivers. Rural residents were more likely than urban residents to have severe MVC injuries. Controlling for residence status, age, and sex did not alter the basic pattern that black drivers had higher rates of non-fatal MVC injuries.

**Conclusions:** The linkage approach provides an effective way to obtain additional information for MVC injury disparity surveillance. To reduce racial disparities in severe and non-severe MVC injuries, race-sex, race-age, and race-location specific interventions should be considered based on their significant contributions to disparity.